

## Osborne County

### Estimated Economic Contribution of Agriculture, Food, and Food Processing Sectors 6/27/2019

Using the most recent IMPLAN data available (2017) adjusted for 2019, 17 agriculture, food, and food processing sectors were analyzed to determine their overall contribution to the Osborne County economy.<sup>1</sup>

These 17 sectors have a total direct output of approximately **\$136.6 million** and support **487 jobs** in Osborne County. Running the model for all 17 sectors simultaneously produces the following results:

Agriculture, Food, and Food Processing Sector Contribution to Overall Osborne County Economy					
Contribution Type <sup>2</sup>	Employment	% Employment	Total Value Added <sup>3</sup>	Total Value Added % of Gross Regional Product <sup>4</sup>	Output <sup>5</sup>
Direct Effect	487.2	18.41%	\$27,969,420	20.25%	\$136,614,354
Indirect Effect	174.9	6.61%	\$11,694,440	8.47%	\$25,851,899
Induced Effect	73.6	2.78%	\$4,203,413	3.04%	\$8,819,093
<b>Total Effect</b>	<b>735.7</b>	<b>27.80%</b>	<b>\$43,867,273</b>	<b>31.75%</b>	<b>\$171,285,346</b>

As shown in the above table, agriculture, food, and food processing sectors support **735 jobs**, or **27.80%** of the entire workforce in the county.

Another metric used to calculate the importance of sectors in an economy is their value added as a percentage of GRP. Total value added by the 17 agriculture, food, and food processing sectors is approximately **\$43.9 million**, or **31.75% of the GRP**.

The following tables document the top industries affected by employment and output, as well as a listing of all industries that were analyzed.

<sup>1</sup> Article on building a contribution analysis in IMPLAN that avoids double counting:

<https://implanhelp.zendesk.com/hc/en-us/articles/115002801513-Considerations-of-Contribution-Analysis>

<sup>2</sup> Direct, indirect, and induced effects sum together to estimate the total economic contribution in the state. **Direct effects** capture the contribution from agricultural and food products. **Indirect effects** capture the economic benefit from farms and agricultural businesses purchasing inputs from supporting industries within the state. **Induced effects** capture the benefits created when employees of farms, agricultural businesses, and the supporting industries spend their wages on goods and services within the state.

<sup>3</sup> Value added = labor income + indirect business taxes + other property type income.

<sup>4</sup> GRP = final demand of households + governments expenditures + capital + exports - imports - institutional sales.

<sup>5</sup> Output = intermediate inputs + value added.

In the top ten agriculture, food, and food processing sectors by employment, the beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming sector is the top employer with **241 employees**. This table also shows the amount of jobs that are created by the agriculture industry in Osborne County.

Top Ten Agriculture, Food, and Food Processing Sectors by Employment		
Sector	Total Employment	Total Output
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	241.2	\$29,264,653
Grain farming	70.4	\$26,635,311
Animal, except poultry, slaughtering	69.5	\$45,966,845
Wholesale trade	45.3	\$8,853,409
Truck transportation	43.1	\$5,613,227
Farm machinery and equipment manufacturing	21.3	\$7,941,751
All other crop farming	16.6	\$1,332,292
Veterinary services	13.3	\$1,286,977
Monetary authorities and depository credit intermediation	12.6	\$2,279,590
Landscape and horticultural services	11.8	\$591,496

The animal, except poultry, slaughtering sector directly contributes approximately **\$46.0 million** to the Osborne County economy. The table below also shows the amount of revenue that is generated in other industries by having a strong agriculture industry.

Top Ten Agriculture, Food, and Food Processing Sectors by Output		
Sector	Total Employment	Total Output
Animal, except poultry, slaughtering	69.5	\$45,966,845
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	241.2	\$29,264,653
Grain farming	70.4	\$26,635,311
Oilseed farming	9.1	\$9,865,557
Other animal food manufacturing	7.7	\$9,230,393
Wholesale trade	45.3	\$8,853,409
Farm machinery and equipment manufacturing	21.3	\$7,941,751
Truck transportation	43.1	\$5,613,227
Dairy cattle and milk production	7.6	\$3,062,465
Monetary authorities and depository credit intermediation	12.6	\$2,279,590

Below is a summary of all agriculture data with employment levels and output level. These values can tell how many jobs are represented by each agriculture, food, and food processing sector and the output they contributed to the Osborne County economy.

All Agriculture, Food, and Food Processing Sectors		
Sector	Total Employment	Total Output
Oilseed farming	9.1	\$9,865,556.72
Grain farming	70.4	\$26,635,311.13
All other crop farming	16.6	\$1,332,292.44
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	241.2	\$29,264,652.25
Dairy cattle and milk production	7.6	\$3,062,465.43
Poultry and egg production	0.2	\$177,356.24
Animal production, except cattle and poultry and eggs	3.3	\$409,935.53
Commercial logging	1.3	\$34,767.03
Commercial hunting and trapping	1.3	\$24,926.11
Support activities for agriculture and forestry	9.0	\$359,277.70
Other animal food manufacturing	7.7	\$9,230,392.46
Animal, except poultry, slaughtering	69.5	\$45,966,846.47
Bread and bakery product, except frozen, manufacturing	3.5	\$398,970.07
Frozen cakes and other pastries manufacturing	0.2	\$31,382.40
Farm machinery and equipment manufacturing	21.3	\$7,941,751.00
Veterinary services	13.3	\$1,286,976.58
Landscape and horticultural services	11.8	\$591,495.87

All 105 counties in Kansas have an IMPLAN model and an agriculture, food, and food processing contribution summary. These values do not factor in the retail environment of food sales. Food retail is important, but in order to provide the most accurate picture of what production agricultural and processing contributes to Osborne County, the retail sector was omitted.